Appendix 1

Letters Objecting to the Proposal:

Letter dated, December 15, 1987, to the Honorable Donald P. Hodel from Diane Feinstein, Mayor of San Francisco, CA.

Letter dated, October 27, 1987, to the Honorable Donald P. Hodel from Joseph B. Marcotte, Sr., Chief Executive Officer, Modesto Irrigation District.

OFFICE OF THE MAYOR
SAN FRANCISCO

DIANNE FEINSTEIN

December 15, 1987

The Honorable Donald Hodel
Secretary of the Interior
Department of the Interior
18th & C Streets NW
MIB
Washington, D.C. 20240

Dear Mr. Secretary;

We have reviewed the draft report of the Bureau of Reclamation on Water and Power Replacement Concepts for the Hetchy Hetchy system. We have serious concerns with the report and do not concur with the Bureau's proposal to spend $3-5 million on further studies based on this report. None of the options proposed can be justified as feasible from an environmental, hydrological, water quality, water supply, cost or governmental standpoint.

The Hetch Hetchy system provides the highest quality drinking water to over 2 million people in the Bay Area. It also provides a clean source of hydroelectric power to Modesto and Turlock Irrigation Districts and for the municipal needs of San Francisco. The Hetch Hetchy system, authorized by Congress in 1913 after significant debate, is cost effective, operated in an environmentally sound manner and is beneficial to downstream uses on the Tuolumne River. It was also primarily paid for with local funds.

You now propose to spend federal dollars to replace this system with some as-yet-to-be-determined conglomeration of facilities and projects, some of which do not even exist at this time and may never be built given the growing environmental opposition to new water facilities. The costs associated with some of your proposals are in the billions of dollars even by the Bureau's own estimates.

Each of the options proposed in the Bureau's report raises major conflicts with other water users at a time when California is struggling to address statewide water management, water supply and water quality issues. The report virtually ignores that significant water rights problems and likely litigation are inherent in each one of the proposed options. And the report ignores that any of the options would seriously diminish the reliability, quality and efficiency of the Hetch Hetchy system.

For example, the Bureau's basic proposal to reoperate the facilities on the Tuolumne River is not feasible. At today's level of water exports, without Hetch Hetchy reservoir, the remaining facilities configured as the Bureau suggests fail to meet both export and MID/TID water needs. In dry years there would not be enough water available to meet even current demand. Exports from New Don Pedro would require higher and more complex levels of treatment because the watershed does not have the same protections as the Hetchy watershed. New Don Pedro was designed to store irrigation water and is heavily used for recreational purposes. And besides, San Francisco has no legal right to water stored in New Don Pedro.

The passage of Proposition 65 clearly demonstrates that the people of California are increasingly concerned about the quality of water they are drinking. The enactment of new state and federal drinking water standards reflects that concern. The elimination of the Hetch Hetchy reservoir would downgrade the drinking water supply of the 2 million people in 32 Bay Area communities and require more treatment. In the face of questions about the health risks associated with water treatment, it is becoming increasingly apparent that treatment is not and cannot be a substitute for a high quality water source.

The Bureau's report fails to address the implications of your idea in any significant way. It also fails to develop any clear picture of the alternative you propose for the use of the Hetch Hetchy Valley and the environmental and cost issues attendant with that proposal. We do not believe the benefits of any alternative you propose could outweigh the costs of this idea.

We cannot help but conclude that the idea to remove Hetch Hetchy must rank at the bottom of the list of priorities for the federal government, the state and certainly the Bay Area. It seems irresponsible to us to spend the billions of dollars in public funds necessary to implement your "idea", or even the $3-5 million the Bureau has proposed for the further development of this "idea". In light of the federal budget deficit and the critical human concerns and environmental projects that need federal funding throughout the country, we suggest that there are far better alternatives for this money.

Sincerely,

Dianne Feinstein

Dianne Feinstein,
Mayor

MID Modesto Irrigation District
ter and Power

1231 Eleventh St.
P.O. Box 4060
Modesto, CA 95352
(209) 578-1212

October 27, 1987

The Honorable Donald P. Hodel
Secretary of the Interior
Department of the Interior
18th and C Streets, N.W.
Washington, D.C. 20240

Dear Mr. Secretary:

Enclosed herewith for your information is a copy of a policy statement of the Modesto Irrigation District unanimously adopted by formal action of the District's Board of Directors during their meeting of today.

In the discussion which preceded the formal action of the Board, it became clear that the policy statement coincides completely with what the Directors have been hearing from the public they represent, namely - universal opposition to the notion of removing or breaching O'Shaughnessy Dam and returning Hetch Hetchy Valley to a state of nature.

Sincerely,

Joseph B Marcotte Jr.

JOSEPH B. MARCOTTE, JR.
Chief Executive Officer

JBM:sr

Enclosure

xc: Ernest Geddes, General Manager, TID
Dianne Feinstein, Mayor, San Francisco
Senator Alan Cranston
Senator Pete Wilson
Congressman Tony Coelho
Senator Dan McCorquodale
Senator Ken Maddy
Senator Ruben Ayala
Assemblyman Gary Condit
Assemblyman Jim Costa
David Kennedy, Director, DWR
David Houston, Regional Director, USBR
Robert Kallman, Asst. to the Secretary, DOI
John Fraser, Executive Director, ACWA
Jeffrey L. Nelson, President, NWRA
Jerry Jordan, Executive Director, CMUA

Board
Bradford
Hunt
Moseley
Conner
Hawkins

RESOLUTION NO. 87-162
POSITION OF MODESTO IRRIGATION DISTRICT
RELATIVE TO SECRETARY OF INTERIOR'S PROPOSAL TO REMOVE
HETCH HETCHY DAM

BE IT RESOLVED that the Modesto Irrigation District "MID" opposes the removal of O'Shaughnessy Dam and/or draining of Hetch Hetchy valley or modifications of the benefits which derive therefrom. It recognizes that if the dam did not presently exist and consideration were being given to construction of a dam in that location, environmental values would likely preclude construction of a new dam. Given the existence of the present dam and the established dependency of water and electricity provided by it, and the costs associated with restoration of the valley and providing replacement electricity and water, weighed against the environmental values which may be recovered from such a restoration, the removal does not appear to "make sense."

RESOLVED FURTHER "MID" does not want to be injured either economically or physically. Recognizing that events could occur which may have an impact on the existing system, "MID" holds that it has existing legal and contractual rights and is entitled to enjoy those rights without injury.

RESOLVES FURTHER that "MID" asserts that the City and County of San Francisco and the Turlock Irrigation District must not be injured, either economically or physically. "MID" is contractually bound to both of the above and will likely suffer in the event that either is injured.

RESOLVED FURTHER that the "MID" understands that there is a strong desire on the part of the Secretary of the Interior to evaluate the possibility of removal of Hetch Hetchy Dam, "MID" will make available, as requested, information for that evaluation provided that it is an active participant through the evaluation study and decision-making process.

The foregoing resolution was introduced by Director Cowan, who moved its adoption, seconded by Director Lyons, and adopted unanimously by a vote of all Directors present.

oOo

I, VICKIE EHRLER, Secretary of the Board of Directors of the MODESTO IRRIGATION DISTRICT, do hereby CERTIFY that the foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of said Board of Directors held on the 27th day of October, 1987.

Vickie Ehrler

Secretary of the Board of Directors
of the Modesto Irrigation District

Appendix 2

Western Systems Coordinating Council Summary of Estimated Loads and Resources, April 1987.

California - Southern Nevada Power Area

WESTERN SYSTEMS COORDINATING COUNCIL
SUMMARY OF ESTIMATED LOADS AND RESOURCES
CALIFORNIA - SOUTHERN NEVADA POWER AREA

YEAR 1996
ADVERSE HYDRO CONDITIONS

PEAK DEMAND - MEGAWATTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
LOADS - FIRM	39854	39804	38275	38911	43457	47463	51983	52646	51439	41790	39980	41813
INTERRUPTIBLE	90	90	90	90	90	90	80	90	90	90	90	90
TOTAL LOAD	39944	39894	38365	39001	43547	47553	52073	52736	51529	41880	40070	41903
RESOURCES - HYDRO - CONVENTIONAL	10864	10934	11000	11106	11080	11133	10978	10908	10801	10804	10701	10698
HYDRO - PUMPED STORAGE	3181	3175	3170	3165	3255	3359	3318	3200	3159	3151	3133	3118
STEAM - COAL	5291	5291	5291	5291	5291	5333	5333	5333	5333	5333	5333	5333
STEAM - GAS AND OIL	19645	19645	19645	19645	19639	19639	19639	19639	19639	19645	19645	19645
NUCLEAR	6697	6696	6693	6689	6677	6667	6669	6669	6669	6683	6694	6697
COMBUSTION TURBINE	2842	2835	2828	2821	2668	2648	2655	2664	2651	2728	2828	2842
COMBINED CYCLE	1614	1614	1614	1614	1554	1554	1554	1554	1554	1554	1614	1614
GEOTHERMAL	3491	3491	3491	3491	3491	3525	3525	3525	3525	3541	3541	3541
INTERNAL COMBUSTION	376	376	376	376	376	376	376	376	376	376	376	376
COGENERATION	3539	3539	3539	3539	3539	3539	3539	3539	3539	3539	3539	3539
OTHER	2226	2226	2226	2226	2227	2328	2378	2377	2377	2377	2376	2376
TOTAL RESOURCES	59766	59822	59873	59963	59797	60101	59964	59784	59623	59731	59780	59779
INOPERABLE CAPABILITY	476	476	476	519	519	510	516	518	551	543	479	476
SCHEDULED MAINTENANCE	7029	6589	7940	8379	3891	1546	432	280	1443	5849	7039	4383
TOTAL UNAVAILABLE CAPABILITY	7505	7065	8416	8898	4410	2056	948	798	1994	6392	7518	4859
NET RESOURCES	52261	52757	51457	51065	55387	58045	59016	58986	57629	53339	52262	54920
FIRM/JOINT PART. IMPORTS - NWPP	-1247	-1322	-1322	-1322	-1322	-1619	-1619	-1652	-1652	-1355	-1247	-1247
AZ-NM	-4427	-4424	-4440	-4452	-4452	-4458	-4458	-4458	-4457	-4421	-4422	-4428
TOTAL IMPORT	-5674	-5746	-5762	-5774	-5774	-6077	-6077	-6110	-6109	-5776	-5669	-5675
FIRM/JOINT PART. EXPORTS - NWPP	728	728	431	431	431	461	461	461	461	461	758	758
AZ-NM	165	166	166	167	168	169	169	169	170	167	166	165
TOTAL EXPORT	893	894	597	598	599	630	630	630	631	628	924	923
NET EXPORTS/IMPORTS	-4781	-4852	-5165	-5176	-5175	-5447	-5447	-5480	-5478	-5148	-4745	-4752
JOINT PARTICIPATION TRANSFERS	-3983	-3983	-3983	-3983	-3983	-3953	-3953	-3953	-3953	-3953	-3953	-3953
NET FIRM TRANSFERS*	-798	-869	-1182	-1193	-1192	-1494	-1494	-1527	-1525	-1195	-792	-799
PLANNED PURCHASES/SALES	-2438	-1915	-1703	-1571	-2009	-4108	-5103	-4625	-4121	-3695	-2748	-1941
NET RESOURCES AND NET TRANSFERS	55497	55541	54342	53829	58588	63647	65613	65138	63275	58229	55802	57660
MARGIN OVER FIRM LOAD - MW	15643	15737	16067	14918	15131	16184	13630	12492	11836	16439	15822	15847
MARGIN OVER FIRM LOAD - PERCENT 1/	39.3	39.5	42.0	38.3	34.8	34.1	26.2	23.7	23.0	39.3	39.6	37.9

*NET EXPORTS/IMPORTS LESS JOINT PARTICIPATION TRANSFERS (MINUS SIGN INDICATES PURCHASE).
JOINT PARTICIPATION GENERATION IS INCLUDED BY TYPE UNDER "RESOURCES" IN EACH PARTICIPANT'S AREA.

1/ A 20 percent margin over firm load is considered adequate (see Note 19 on Appendix 3)

WESTERN SYSTEMS COORDINATING COUNCIL
SUMMARY OF ACTUAL LOADS AND RESOURCES
CALIFORNIA - SOUTHERN NEVADA POWER AREA

ACTUAL YEAR 1986
ACTUAL HYDRO CONDITIONS

PEAK DEMAND - MEGAWATTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
LOADS - FIRM	30131	30906	30249	31321	34713	38939	39205	41504	37349	31784	30739	31997
INTERRUPTIBLE	80	80	80	80	80	80	80	80	80	80	80	80
TOTAL LOAD	30211	30986	30329	31401	34793	39019	39285	41584	37429	31864	30819	32077
RESOURCES - HYDRO - CONVENTIONAL	9883	10006	10129	10069	10535	10455	10582	9405	8948	9187	9192	9469
HYDRO - PUMPED STORAGE	3096	3231	3186	3186	3225	3375	3220	3186	3158	3096	3096	3096
STEAM - COAL	4776	4706	4706	4706	4706	4706	5474	5474	5474	5604	5534	5534
STEAM - GAS AND OIL	21395	21395	21395	21395	21378	21378	21378	21378	21378	21378	21395	21395
NUCLEAR	4562	4903	6005	6000	5986	5986	5977	6326	6326	6340	6351	6354
COMBUSTION TURBINE	2380	2423	2416	2434	2395	2400	2407	2416	2403	2464	2564	2578
COMBINED CYCLE	1194	1194	1194	1194	1132	1132	1132	1132	1132	1132	1194	1194
GEOTHERMAL	2197	2197	2197	2197	2252	2246	2246	2256	2356	2362	2362	2362
INTERNAL COMBUSTION	52	52	52	52	52	52	52	77	77	77	77	77
COGENERATION	642	645	645	645	640	645	645	762	762	759	759	760
OTHER	367	411	399	409	516	414	471	547	463	421	423	446
TOTAL RESOURCES	50544	51163	52324	52287	52817	52789	53594	52859	52477	52820	52947	53265
FORCED OUTAGES	6533	6239	4783	6071	6374	5644	6089	2965	6878	5083	2930	4400
INOPERABLE CAPABILITY	481	410	395	501	595	964	982	670	885	655	989	767
SCHEDULED MAINTENANCE	5068	7093	6399	5788	4156	1729	1218	1470	2287	4757	6761	6412
TOTAL UNAVAILABLE CAPABILITY	12082	13742	11577	12360	11125	8337	8289	5105	10050	10495	10680	11579
NET RESOURCES	38462	37421	40747	39927	41692	44452	45305	47854	42427	42325	42267	41686
FIRM/JOINT PART. IMPORTS - MAPP	-157	-156	-157	-156	-157	-157	-157	-157	-157	-157	-156	-157
NWPP	-1764	-2614	-2056	-2862	-2659	-3174	-3787	-3503	-3705	-3089	-2751	-2906
AZ-NM	-3091	-3288	-3412	-3356	-3575	-3617	-3386	-3792	-3673	-3830	-3786	-3878
TOTAL IMPORT	-5012	-6058	-5625	-6374	-6391	-6948	-7330	-7452	-7535	-7076	-6693	-6941
FIRM/JOINT PART. EXPORTS - NWPP	80	80	0	0	0	0	200	200	200	200	200	280
AZ-NM	197	197	197	192	192	192	287	287	287	242	242	292
TOTAL EXPORT	277	277	197	192	192	192	487	487	487	442	442	572
NET EXPORTS/IMPORTS	-4735	-5781	-5428	-6182	-6199	-6756	-6843	-6965	-7048	-6634	-6251	-6369
JOINT PARTICIPATION TRANSFERS	-2628	-2900	-2900	-2905	-2905	-2905	-2873	-3218	-3218	-3348	-3278	-3278
NET FIRM TRANSFERS*	-2107	-2881	-2528	-3277	-3294	-3851	-3970	-3747	-3830	-3286	-2973	-3091
NET RESOURCES AND NET TRANSFERS	40569	40302	43275	43204	44986	48303	49275	51601	46257	45611	45240	44777
MARGIN OVER FIRM LOAD - MW	10438	9396	13026	11883	10273	9364	10070	10097	8908	13827	14501	12780
MARGIN OVER FIRM LOAD - PERCENT 1/	34.6	30.4	43.1	37.9	29.5	24.0	25.7	24.3	23.9	43.5	47.2	39.9

*NET EXPORTS/IMPORTS LESS JOINT PARTICIPATION TRANSFERS (MINUS SIGN INDICATES PURCHASE).
JOINT PARTICIPATION GENERATION IS INCLUDED BY TYPE UNDER "RESOURCES" IN EACH PARTICIPANT'S AREA.

1/ A 20 percent margin over firm load is considered adequate (see Note 19 on Appendix 3)

Appendix 3

Pacific Gas & Electric Company
Common Forecasting Methodology 7
Volume III
Electric Supply Forms
1987 - 1999
September 1987

Summary of Loads and Resources
Dependable Capacity in Megawatts

SUMMARY OF LOADS AND RESOURCES
Dependable Capacity in Megawatts (MW)

	Actual 1984	Actual 1985	Actual 1986	July 1987	July 1988	July 1989	July 1990	July 1991	July 1992	July 1993	July 1994	July 1995	July 1996	July 1997	July 1998	July 1999
1. PEAK LOAD (MW)																
a. Gross Total Load	N/A	N/A	N/A	15205	15409	15536	15955	16307	16819	17190	17634	17996	18353	18761	19252	19709
b. System Losses	N/A	N/A	N/A	1782	1731	1744	1792	1843	1893	1930	1985	2032	2082	2132	2193	2250
c. Contractual Firm Exports (1)	0	0	0	39	39	39	39	39	39	39	39	39	39	39	39	39
d. Conditional DSP (2)	N/A	N/A	N/A	0	0	0	-19	-58	-107	-213	-320	-426	-533	-639	-638	-671
e. TOTAL PEAK DEMAND (3)	16225	16507	15439	16946	17179	17319	17767	18215	18644	18962	19320	19641	19941	20293	20825	21327
2. GENERATION CAPACITY (MW)																
a. Nuclear (4)	875	1940	3027	3027	3027	3027	3027	3027	3027	3027	3027	3027	3027	3027	3027	3027
b. Coal—Conventional (5)	0	0	0	0	0	0	0	15	25	25	25	40	40	40	40	40
—Advanced	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c. Oil and Gas Steam	7213	7213	7213	7213	7213	7213	7213	7213	7213	7213	7213	7213	7213	7213	7213	7213
d. Combustion Turbine (6)	394	394	414	571	571	571	621	621	621	621	621	621	621	621	621	621
e. Combined Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogeneration (7)																
f. Fossil	421	516	637	955	1130	2106	2365	2379	2379	2379	2379	2379	2379	2379	2379	2379
g. Nonfossil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
h. Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
i. Geothermal—Vapor (8)	1395	1400	1737	1715	1758	1946	1986	1986	2026	2026	2026	2166	2166	2166	2166	2166
j. Wind (9)	11	44	67	164	168	211	220	220	224	224	224	224	224	224	224	224
k. Solar—Photovoltaic (10)	3	2	5	4	4	5	6	7	7	7	7	7	7	7	7	7
l. Fuel Cells	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
m. Hydro (11)	6607	6626	4364	5124	5132	5173	5527	5546	5656	5712	5731	5753	5753	5773	5773	5773
n. Pumped Storage (12)	1050	1204	1212	1186	1186	1186	1186	1186	1186	1186	1186	1186	1186	1186	1186	1186
o. Imports—Northwest (13)	1450	1351	1524	1792	1792	1792	2000	2742	2746	2748	2750	2763	2763	2768	2779	2779
—Southwest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
—California	796	43	2	0	0	0	0	0	0	0	0	0	0	0	0	0
p. Generic Resources (14)	0	0	0	0	0	25	75	125	175	225	275	325	425	450	450	450
q. Self Generation (15)	N/A	N/A	N/A	640	697	870	904	1044	1104	1165	1226	1287	1348	1410	1473	1537
r. Inadvertent (16)	3	35	-49	0	0	0	0	0	0	0	0	0	0	0	0	0
s. TOTAL GENERATION CAPACITY	20218	20770	22113	21959	22670	24025	25110	26011	26309	26530	26690	26999	27162	27271	27334	27400
3. MAINTENANCE/OUTAGES (17)	2952	1370	1750	875	0	0	0	0	0	0	0	0	0	0	0	0
4. NET CAPACITY	17266	19400	20363	21084	22670	24025	25110	26011	26309	26530	26690	26999	27162	27271	27334	27400
5. RESERVE MARGIN (%) (18)	6.4%	17.5%	31.9%	24.4%	32.0%	38.7%	41.4%	42.8%	41.5%	40.1%	38.1%	37.5%	36.2%	34.4%	31.3%	28.5%
6. ERI (19)	N/A	N/A	N/A	0.05	0.02	0.01	0.01	0.01	0.01	0.02	0.03	0.04	0.05	0.10	0.17	0.28

PGandE Planning Area
Data Filed: 1 SEP 87
Utility Contact: Frank H. Bandifer
Phone: (415) 972-6524

SUMMARY OF LOADS AND RESOURCES
Dependable Capacity in Megawatts (MW)

Form A-1
CEC contact: Pat McAuliffe
Phone: (916) 324-3682

FOOTNOTES:

(1) - Forecast exports include sales under contract with the Southern California cities of Anaheim, Azusa, Banning, Colton, and Riverside.
(2) - Conditional Demand-Side Management programs. The peak load forecasts already takes into account the demand reductions due to unconditional DSM.
(3) - Actual peak load or forecast peak load for the month of July.
(4) - The nuclear units included are Diablo Canyon Unit 1 (1073 MW) and Unit 2 (1079 MW) and SMUD's Rancho Seco plant (875 MW dependable capacity in July). Rancho Seco's capacity is shown on line 3 as maintenance in 1987 and is assumed to return to service in June of 1988.
(5) - Coal--Conventional is the City of Santa Clara's share of the forecast import by NSR (Modesto, Santa Clara, and Redding) from an existing coal plant in San Juan, New Mexico. Increases between 1991 and 1993 represent information from NSR.
(6) - PGandE's combustion turbines are rated at 394 MW for the month of July. NCPA and Santa Clara have recently installed combustion turbine capacities of 127 MW and 50 MW, respectively. The total of 571 MW increases to 621 MW in 1990 due to inclusion of 50 MW of SMUD gas turbine capacity.
(7) - Line 21 shows the dependable capacity sold by all thermal Qualifying Facilities to PGandE regardless of fuel type (except geothermal QFs). Line 24 also includes PGandE's 4 MW Gerber cogeneration facility and, for 1984-1986, PGandE's Avon, Martinez, and Pittsburg refinery cogeneration facilities (179 MW).
(8) - Geothermal includes PGandE's Geysers units, geothermal Qualifying Facilities, and shares of geothermal units owned by other entities in the PGandE planning area (i.e. NCPA, Santa Clara, SMUD). Geothermal additions include PGandE's Geysers 21 (160 MW in late 1991) and Geysers 22 (140 MW in late 1994), SMUD and Santa Clara's 90 MW share of CCPA units 1 and 2 in late 1988, and QF projects.
(9) - Wind includes the dependable capacity of PGandE's Solano Unit (2.5 MW installed) and wind QFs. Dependable capacity is assumed to be 20% of installed capacity.
(10) - Solar includes the existing QF Arco project (6.9 MW), both of SMUD's 1 MW solar units, and PGandE's 3 MW PVUSA demonstration solar photovoltaic project assumed to phase into operation at 1 MW per year increments starting in 1989. Data shown in the table represent dependable capacity assumed to be 50% of installed capacity.
(11) - Hydro additions include 8 projects, NCPA's 200 MW Calaveras project (1990), 100 MW of unidentified non-PGandE capacity (1993 to 1997), and 200 MW of PGandE capacity primarily related to relicensing improvements.
(12) - Actual pumped storage data reflect actual operation and testing of PGandE's Helms unit. Forecast data equal the July rating of Helms, under adverse hydroelectric conditions.
(13) - Actual Northwest imports are firm contracts and spot purchases. Forecast Northwest imports include firm imports and spot purchases.
(14) - Generic resources are planned by NCPA and SMUD, and are assumed to be combustion turbines.
(15) - Actual self-generation is not included in either the recorded peak demand or the recorded sources of capacity at the time of the peak and is thus shown as N/A. Forecast self-generation is based on a May 1987 forecast for Long-Term planning purposes.
(16) - Inadvertent is unscheduled transfers into or out of the PGandE planning area.
(17) - Maintenance/outages for 1984-1986 includes overhauls, scheduled outages, and forced outages at the time of the recorded peak demand. The 1987 value reflects only the shutdown of SMUD's Rancho Seco nuclear unit (875 MW July rating). Forecast data are all 0 because no major overhauls are scheduled for July.
(18) - Line 5 Reserve Margin is (Net Capacity - Peak Demand)/Peak Demand x 100%.
(19) - ERI, or Energy Reliability Index, is the relative value of additional capacity towards avoidance of electric supply interruptions due to insufficient generating capacity. An ERI of 1.0 means that the planned reserve margin is less than or just equal to the required reserve margin, which is about 20% based on PGandE's value-of-service reliability criterion. The ERI tends toward zero as the planned reserve margin increases beyond the required reserve margin, reflecting the fact that further capacity additions have progressively less value toward avoiding electric service interruption.

Appendix 4

California Energy Commission
California's Energy Outlook
1987 Biennial Report
Committee Draft
April 1987

Executive Summary

TRANSPORTATION

Currently California's transportation sector is the most susceptible to steep fuel price increases and disruptions in the international oil market. Despite federal, state and private efforts, transportation is still almost totally dependent on oil. There are alternative fuels which show great promise for reducing California's dependence on oil. However, declining oil prices, market barriers, inconsistent federal policies, and insufficient research and development efforts have inhibited the significant use of alternative fuels. The Energy Commission continues to believe that methanol has the greatest potential to displace a substantial portion of oil used in transportation. To increase the methanol fleet and to reduce air pollution, government agencies in nonattainment air basins should adopt programs to substitute methanol for gasoline. In addition, greater development of flexible fuel vehicles can allow consumers to respond to fuel prices and increase the use of alternative fuels.

In the early 1980s, some reduction in the growth of demand for oil had been achieved through the market's reaction to steep fuel price increases, the federal fuel economy standards, and congestion reduction measures such as ramp metering, traffic signal timing, and carpooling. Present use, however, is rising due in large part to lower prices, and unfortunately, the Federal Government has rolled back its Corporate Average Fuel Economy (CAFE) standards. To improve the market for alternative fuels, the federal government should provide CAFE credits as an incentive for auto manufacturers to produce vehicles capable of using methanol fuels.

Excessive dependence on petroleum is <u>not</u> the only crisis facing California's transportation system. The state has grown faster than the present highway system can accommodate and we can look forward to increasing congestion. Deteriorating air quality is the other major problem associated with transportation energy use. These problems are related, since congestion increases fuel use while also degrading air quality. Currently, Caltrans, the Air Resources Board (ARB), and the Energy Commission produce plans and programs which address various aspects of the transportation problem. No single state agency prepares a comprehensive transportation plan that accounts for overlapping state interests. Caltrans, the ARB, and the Energy Commission believe a formal relationship similar to the Methanol Task Force should be established to explore and coordinate solutions to the problem.

The use of telecommunications can help achieve multiple goals of congestion relief, air quality improvements, and energy conservation. The California Department of General Services (DGS) has begun a pilot program evaluating telecommuting as a work option. The Energy Commission plans to support the program through actual participation of its employees and providing analysis of the effects of the program.

ELECTRICITY

California's electricity system is becoming decentralized and increasingly competitive. The utility companies are required to accept power from nonutility generators which creates the need for greater flexibility in the operation and coordination of the supply system. In most areas of California, there are sufficient electricity resources to meet our needs for the next 12 years, unless there is a dramatic increase in demand. These circumstances require the state to be more selective by adding new resources to the system based on an economic preference as well as physical needs and environmental considerations.

Industrial customers have begun building electric generation facilities. These "self generators" represent a potentially large source of electricity supply in California; however, they also represent a corresponding loss of utility sales which could have an uncertain financial effect on utilities and ratepayers alike. Utilities and the California Public Utilities Commission (CPUC) are concerned that self generation will result in increased rates for a smaller number of consumers paying the fixed costs of producing and delivering electricity. The Energy Commission views self generation as another technology that can, like conservation, reduce ratepayer costs both directly (by lower bills to self generators) and indirectly (by forcing the electricity market to be more competitive). To capture these benefits, the Energy Commission has urged the CPUC to consider relieving the utilities of the obligations to serve self generators; ensure that standby charges compensate utilities for the cost of maintaining standby service; and allow the utilities to negotiate with customers to offer competitive rates consistent with the utility's costs.

In the Energy Commission's view, the CPUC should continue to adopt policies which will result in a more competitive energy market in California. The price paid for energy should reflect the cost of providing that energy. The state should reduce the barriers to free access to energy transportation facilities, consistent with protection of ratepayer interest. At the same time, consumers must continue to be provided with energy efficiency tools which allow them some control over their energy bills.

The Energy Commission continues to believe that a diverse resource base for electricity generation is the best insurance against instability. Previous policy focused on the risks of overdependence on oil- and gas-fired generation. The reality is that <u>all</u> generation resources are susceptible to unique events which would limit their availability. Consequently, state policy should encourage the development of an electricity generation system which does not place all of California's electricity "eggs" in a single generation resource "basket."

State energy policy should continue to promote cost-effective government and utility energy efficiency programs. Energy efficiency and load management programs provide long-term benefits by improving responsiveness to energy supply disruptions while reducing the environmental and public health impacts from energy generation facilities. Energy efficiency programs enable consumers to respond to market signals and thus have greater control over their utility bills. In addition, lower energy costs mean more competitive businesses and stimulate the state's economy. The Energy Commission has adopted a comprehensive set of building and appliance standards whose benefit will not be realized unless they are effectively implemented. Over the next two years, the Energy Commission will emphasize full market penetration and effective implementation of the existing standards, prior to considering any new standards.

The development of new technologies is important in achieving adequate long-term energy supplies at a reasonable cost. Just as past research and development (R&D) investments are paying off as today's diverse electricity system, tomorrow's energy improvements will be equally dependent upon the success of current efforts. Energy technology R&D should continue to be focused on technologies which can contribute to greater efficiency, cost stability, and environmental improvement of the existing energy system. In addition to improving our energy outlook, expansion and vitalization of California's energy technology industry can stimulate the state's economy through exports. California's government agencies should work with industry to expand the state's export market capabilities.

Appendix 5

State of California
Department of Water Resources
Bulletin 160-87
January 1988

Meeting Water Needs to 2010

Use and Status of Present Supplies

Meeting Water Needs to 2010

In million acre-feet

Source of Supply	Projected 2010 Net Use	Change from 1985	Remarks
Local surface water	8.3	—	Some relatively small additions are expected.
Ground water safe yield	8.0	0.1	Some additional development is projected in Northern California basins.
Federal Central Valley Project	7.8	0.7	San Felipe Division; New Melones supply contracts; Mid-Valley Canal service area.
Other federal sources	1.2	—	None assumed by 2010.
State Water Project	3.2	0.8	Increase in dependable supplies is 0.8 million acre-feet. See figure showing potential additions to SWP.
Colorado River	4.2	-0.6	Assumes no surplus flow available. Assumes 200,000 acre-feet of 460,000 acre-feet of water salvage is reserved for future use in the Imperial Valley.
Local agency imports (excluding the Colorado River)	1.0	—	Some use of American River water by East Bay Municipal Utility District is projected.
Reclaimed waste water	0.5	0.2	Mostly additional projects in South Coast and San Francisco Bay regions.
Ground water overdraft	2.0	-0.2	Decrease due to Mid-Valley Canal supplies is nearly offset by increases in other locations
Source yet to be determined	0.4	0.4	Needs are primarily in South Coast and Tulare Lake regions.
TOTALS	35.6	1.4	

Major Water Management Actions whose effects appear above in the "Change from 1985" column are listed here and described in subsequent sections of the report.

WATER SUPPLY ADDITIONS:	Delta Pumping Plant Completion Los Banos Grandes Reservoir North Delta Facilities	Kern Water Bank South Delta Facilities North Fork Stanislaus River Project
DELIVERY & USE OF DEVELOPED SUPPLIES:	Coastal Aqueduct-SWP East Branch Enlargement-SWP CVP Wheeling-Purchase-SWP Imperial Irrigation District Salvage Water	San Felipe Division-CVP New Melones Reservoir-CVP Mid-Valley Canal-CVP East Bay MUD American River Contract-CVP
USE OF RECLAIMED WASTE WATER:	Various projects, primarily in the South Coast and San Joaquin Valley regions.	

Use and Status of Present Supplies

Source of Supply	1985 Net Use		Status
	In million acre-feet	In percent	
Local surface water	9.3	27	Mostly fully used. About 0.1 million acre-feet of unused yield is available in Sacramento Valley.
Ground water safe yield	5.9	17	Modest additional supplies in Northern California are available.
Federal Central Valley Project	7.1	21	CVP has an additional uncontracted-for project supply of about 1 million acre-feet, depending on place of use and other factors. (See Chapter 3.)
Other federal sources	1.2	4	Existing supplies are nearly fully committed.
State Water Project	2.4	7	Dependable supplies of existing facilities of 2.3 million acre-feet are fully committed in dry years. Amount shown includes 0.1 million acre-feet surplus water deliveries.
Colorado River	4.8	14	Recent use has averaged 4.8 million acre-feet. Firm supply will be reduced to 4.4 million acre-feet after start of Central Arizona Project. California gets first surpluses in lower Colorado River.
Local agency imports (excluding the Colorado River)	1.0	3	San Luis Obispo County, San Francisco, and East Bay Municipal Water District have unused supplies, but conveyance facilities are needed.
Reclaimed waste water	0.3	1	Some potential exists for increased use of existing waste water supplies, primarily in Southern California and the San Francisco Bay area.
Ground water overdraft	2.2	6	Future amount will be affected by availability of alternative surface supplies and economics of pump lifts.
TOTAL	34.2	100	

Appendix 6

State of California
Department of Water Resources
Bulletin 160-87
January 1988

California's Population 1980, 1985, and 2010

California's Population--1980, 1985, and 2010

In millions

Region	1980	1985	2010	Increase 1980-1985		Increase 1985-2010	
San Francisco Bay and Central Coast	5.8	6.3	7.9	0.5	8%	1.6	26%
South Coast	12.9	14.1	19.1	1.2	10%	5.0	35%
Sacramento River	1.7	1.9	3.0	0.2	13%	1.1	57%
San Joaquin River and Tulare Lake	2.2	2.5	4.2	0.3	15%	1.7	67%
Colorado River	0.3	0.4	0.7	0.1	19%	0.3	91%
Remaining Regions	0.8	0.9	1.4	0.1	13%	0.5	57%
California	23.7	26.1	36.3	2.4	10%	10.2	39%

Source: California Department of Finance.

Appendix 7

Memorandum to the Public Utilities Commission, City and County of San Francisco, California, dated, December 17, 1987, analyzing proposed new power contracts involving Hetch Hetchy Power.

December 17, 1987

TO: The Public Utilities Commission
FM: Anson B. Moran
RE: New Power Contracts

We have just concluded our negotiations with PG&E and the Modesto and Turlock Irrigation Districts (the Districts). When PUC action is complete, the agreements will be filed with the Clerk of the Board of Supervisors. The Board's action will be requested as follows:

* The Districts' contract requires Board action,
* The PG&E contract is included as an appendix to the Districts' contract and will be included in the transmittal to the Board,
* The contracts will require the Board's timely, but not emergency, consideration,
* In order to operate beyond January 1, 1988 without final contracts the PUC is being asked to adopt an amendment to the interim contract extending its term through Jan 31, 1988 (the limit of the PUC's authority). The Board will be asked to extend the interim contract from February 1 through March 31, 1988 at the time they approve the Districts' contract to allow for regulatory filing and approval.

We believe that this schedule will provide opportunity for full review and consideration of the proposed contracts.

CONTRACT SUMMARY

The table which follows compares the old (pre-'85) and new contracts. Significant features are noted below:

* On average the net revenues to the City from Hetch Hetchy will nearly double,
* In dry years Hetchy will be at less financial risk than under the old contracts and will be able to cover their costs under even the most adverse years,
* Charges for transmission of Hetchy power to the City are unchanged,
* Access to assigned customers for sale of Hetchy's excess power is assured at market-based rates.
* Rate structures are assured for the life of the agreements,
* The City is protected from retroactive application of the CPUC's expected Diablo rate ruling and PG&E's filing for additional Diablo rates with the Federal Energy Regulatory Commission (FERC).

FINANCIAL COMPARISON*

	($ Millions) Old	New
District Power Sales	9.5	37.1
City Power Sales	32.0	34.0
Assigned Customers	9.0	5.4
Water and Other Revenues	10.9	10.9
Total Revenues	61.4	87.4
Transmission (Wheeling)	7.3	7.3
Supplemental (Firming) Service	.9	12.8
Capital & Operating Budgets	38.6	38.6
Total Expenditures	46.8	58.7
Hetch Hetchy Net	14.6	28.7

* Comparison is based on 67 years of water history, and is expressed in constant, 1988 Dollars

BACKGROUND

Our prior contracts with PG&E and the Districts expired on June 30, 1985. In negotiating new contracts our first objective was to maximize revenues to the City by selling Hetchy's power at market based, firm power rates. In order to sell our power as firm, we needed to establish a new relationship with PG&E to support us at times that we could not generate our firm commitments. Thus, the new contracts that we needed to negotiate with both PG&E and the Districts were to be of substantially different form and content than the old contracts.

In order to gain the time required time to negotiate these new contracts, the City (ie the PUC, Board and Mayor) entered into an interim contract with PG&E and the Districts. This contract continues through December 31, 1987 and establishes the commitment to enter into long term contracts to take effect on January 1, 1988 which must include the following principles:

* City to sell 260-290 mw of firm power to the Districts
* For a period of 30 years starting July 1, 1985
* At a fixed price (36.25 mills) to be adjusted for inflation.

The above principles included in the interim contract left a lot of language, administrative and implementation detail to be worked out during the 2 1/2 year interim period. In addition to working out these details, our objectives in this phase of negotiations were:

* To secure the net revenue benefits anticipated at the signing of the interim agreements,
* To obtain firming services from PG&E through cost based rates,
* To minimize the cost of firming services in a dry year,
* To continue cost based transmission services,
* To continue access to assigned customers for the sale of Hetchy's excess power,
* To retain maximum operating flexibility for Hetchy.

The interim agreement fixed the most substantive terms of the Districts' agreement. Accordingly, most "new" work was done in negotiating the PG&E contracts. In neither agreement, however, was there any such thing as a minor issue and the negotiations of the past 2 1/2 years have been intense.

OUTCOME

The agreements that the PUC will be sending to the Board achieve and exceed our objectives. The table presented earlier in this memo shows that average net Hetchy revenues will grow from $14.6 million to $28.7 million after operating and capital budgets are funded. Over the remaining 27 1/2 years of these agreements, this will be worth nearly $390,000,000.00 in 1988 dollars.

In addition to increased net revenues, the agreements submitted by the PUC obtain for the City the following benefits:

* The dry year financial risk will be slightly less than it was under the old agreements when we had no obligation to purchase supplemental power for the Districts.
* We have reduced dry year costs, preserved operating flexibility and eliminated the possibility of costly operating errors by obtaining a supplemental power agreement from PG&E that contains no peak period and no ratchet for capacity purchases.
* We have obtained capacity credits which establish minimums below which there will be no charge for capacity purchases.
* We are purchasing an option on up to 200 mw of transmission capacity into the City, preserving our ability to double municipal consumption of Hetchy power.
* PG&E and District rates will be adjusted for inflation. The structure of rates is fixed to include the above terms for the life of the contracts.
* We have assured access to assigned customers so that we will always have customers for excess Hetchy generations.
* The City is not precluded from buying or selling power from or to other utilities.
* The City's obligation to provide firm power to the Districts is limited to 90 days after a system failure or other uncontrollable force (not including a dry year).
* The amount of firm power available to the Districts will be adjusted for changes in San Francisco Municipal Load, water delivery requirements, and acts of the Court or Congress.

OTHER NOTES

* Neither Contract precludes municipalization.

* Our obligation to sell firm power to the Districts is for 30 years and started 2 1/2 years ago with approval of the interim contract. Thus, if we were to municipalize, we would have to purchase power to sell through the municipalized system. Nothing in these agreements prohibits such purchases.

* PUC staff has obtained independent legal counsel to the effect that our obligation to the District is a firm contractual obligation.

* The PUC's approval of the PG&E contract does not compromise Board action in that there are "unwind" provisions should the Board not approve the Districts' contract.

* We need the PG&E contract even without the Districts' contract in order to get Hetchy power to City facilities and to provide access to assigned customers.

* We have confirmed that the rate that we will receive from the Districts is still competitive. The most recent comparable bids were in response to SMUD's RFP which were in the range of 38-42 mills. The Districts will be paying us slightly over 40 mills.

CONCLUSION

We believe that the proposed contracts with PG&E and the Districts are very much in the City's interest and are the best contracts obtainable. The contract terms are aggressive and are tailored to meet the City's unique needs. Specifically, the following points make these contracts unbeatable.

* We are obligated to sell power to the Districts, the rate that we will be getting is competitive and will double our net revenues.

* The Districts' contract protects the City from risk of:
  - System failure longer than 90 days
  - Changes in San Francisco municipal loads
  - Changes in San Francisco's water delivery requirements
  - Adverse actions by the Court or Congress

- The PG&E contract protects the City from risk of:
  - Excessive dry year costs
  - Loss of assigned customers
  - Retroactive application of Diablo rates
  - FERC filing for Diablo rates in excess of what the CPUC allows
  - Operator scheduling errors forcing on-peak purchases of power
  - Changes in PG&E's rate making methodology

Appendix 8

Excerpts from the General Management Plan for the Yosemite National Park

A. Influences on Planning

B. Boundary Alteration, Land Acquisition, and Wilderness Additions

C. Developed Area Plans

INFLUENCES ON PLANNING

PURPOSE OF THE PARK

There are two purposes for Yosemite National Park. The first is preservation of the resources that contribute to Yosemite's uniqueness and attractiveness – its exquisite scenic beauty; outstanding wilderness values; a nearly full diversity of Sierra Nevada environments, including the very special sequoia groves; the awesome domes, valleys, polished granites, and other evidences of the geologic processes that formed the Sierra Nevada; historic resources, especially those relating to the beginnings of a national conservation ethic; and evidences of the Indians that lived on the land. The second purpose is to make the varied resources of Yosemite available to people for their individual enjoyment, education, and recreation, now and in the future.

MANAGEMENT OBJECTIVES

The National Park Service's mandate to administer Yosemite comes from Congress. Inherent in this mandate are obligations regarding resource management, visitor use, and park operations. These obligations are further defined and established as the management objectives for the general management plan. This plan and all other park management activities are directed toward achieving these basic goals.

Resource Management
Restore and maintain natural terrestrial, aquatic, and atmospheric ecosystems so they may operate essentially unimpaired

Conduct continuing research to gather and analyze information necessary for managing natural resources

Restore altered ecosystems as nearly as possible to conditions they would be in today had natural ecological processes not been disturbed

Protect threatened and endangered plant and animal species and reintroduce, where practical, those species eliminated from the natural ecosystems

Identify and perpetuate natural processes in park ecosystems

Permit only those types and levels of use or development that do not significantly impair park natural resources, and direct development and use to environments least vulnerable to deterioration

Limit unnatural sources of air, noise, visual, and water pollution to the greatest degree possible

Preserve, protect, and restore scenic resources

Identify the major scenic resources and the places from which they are viewed

Provide for the preservation or protection of existing scenic resources and viewing stations

Provide for historic views through vista clearing

Permit only those levels and types of use that are compatible with the preservation or protection of the scenic resources and with the quality of the viewing experience

Preserve, restore, or protect significant cultural resources (historic and prehistoric)

Identify, evaluate, and determine the significance of cultural resources, encompassing buildings, structures, sites, and objects

Provide for the preservation, restoration, or protection of these significant cultural resources

Permit only those uses that are compatible with the preservation of significant cultural resources

Visitor Use

Assist all people in understanding, enjoying, and contributing to the preservation of the natural, cultural, and scenic resources

Orient visitors, provide personal assistance, and inform them about opportunities the park provides

Provide interpretive services that relate the natural and cultural significance of Yosemite to visitors with a broad diversity of interests

Provide only for those types and levels of programs and activities that enhance visitor understanding and enjoyment of park resources

Permit only those levels and types of accommodations and services necessary for visitor use and enjoyment of Yosemite

Provide the opportunity for a quality wilderness experience

Provide transportation services that facilitate visitor circulation and enhance preservation and enjoyment of park resources

Park Operations

Maintain a safe, functional, and orderly environment that provides compatible opportunities for resource preservation and enjoyment by visitors and employees

Classify park lands, specifying their management and use, to ensure the achievement of all objectives

Provide facilities for administration, maintenance, and management at appropriate locations.

Locate facilities to minimize exposure to natural hazards such as rockslides, flooding, avalanche, and hazard trees

Encourage an appropriate use of structures with historic, architectural, or engineering significance, consistent with the preservation of their historic fabric

Provide facilities and utility systems that conserve energy and comply with all applicable standards and codes

Protect the rights, safety, and security of all visitors and employees

Remove barriers that interfere with use of developed facilities by the handicapped and other special populations, and provide easy access for all visitors whenever feasible

Adjust park boundaries as required to preserve and provide for enjoyment of nationally significant resources, to complete ecological units insofar as possible, and/or to provide for more effective management

Provide, at appropriate locations, services and amenities conducive to a community environment for employees

Support an integrated system of compatible regional land uses providing opportunities for recreation, community development, preservation, and economic utilization of resources

Participate with government agencies and private interests in planning for compatible management and use of scenic, natural, cultural, and recreation resources

Promote visitor services and accommodations at sites more appropriate to the preservation of park values and the public interest through coordinated regional planning and encouragement of private enterprise outside the park

LAND MANAGEMENT ZONING

The park is divided into several zones based on management objectives, significance of the resources, and legislative constraints. The zoning plan describes the land use policies that management will work to achieve over the lifespan of this plan. These zones sometimes overlap, as in the case where outstanding natural features and highly significant archeological resources coincide in a designated area. As a result, management decisions must be based on equal recognition of both resources.

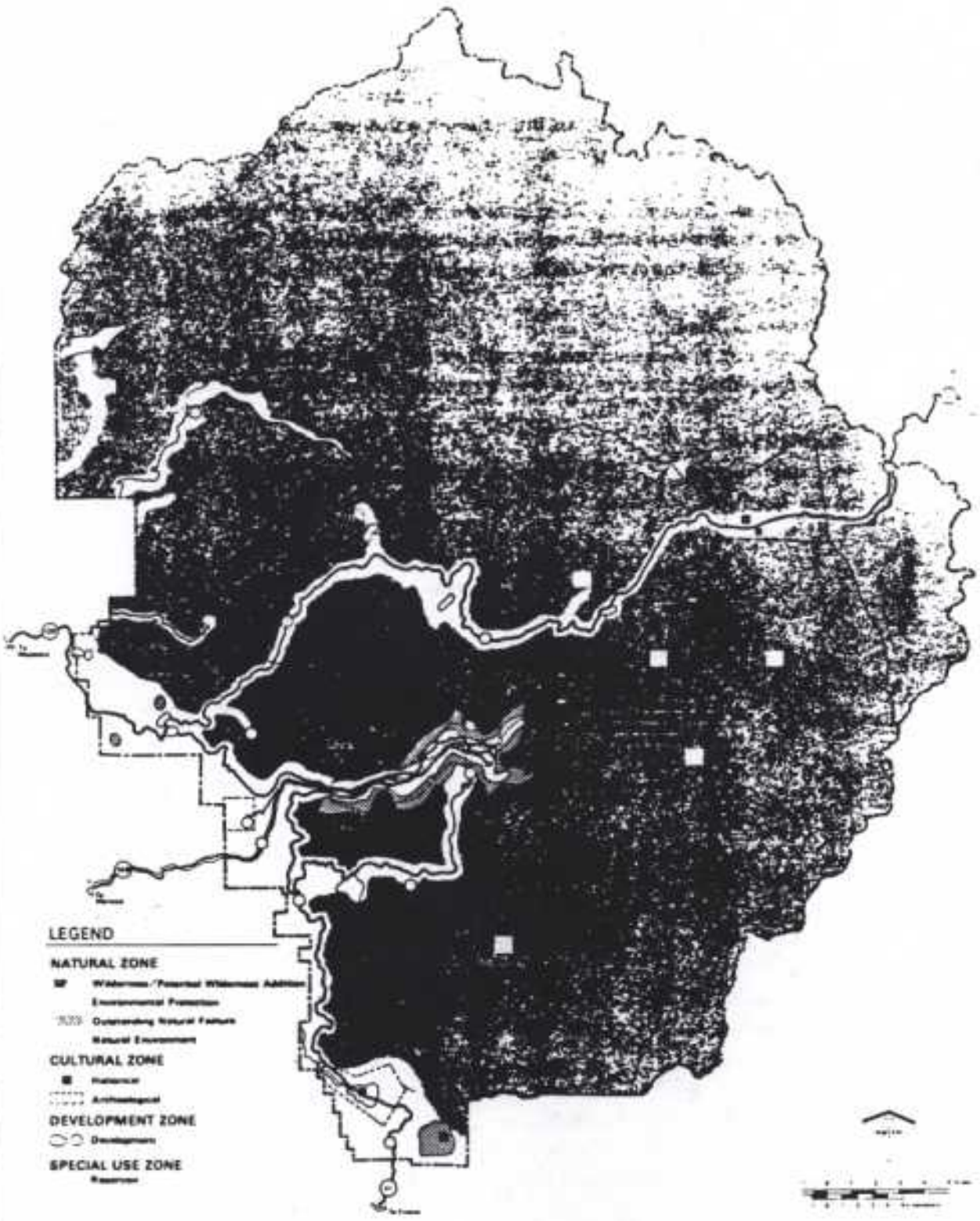
Natural Zone

Wilderness Subzone. All lands included in the administration's wilderness recommendation and lands proposed to be added to this recommendation make up this subzone. Natural systems and processes will be permitted to follow their courses with minimum intrusion by man. The number of visitors will be limited to levels which do not significantly affect natural environments.

Environmental Protection Subzone. Lands within this subzone have been dedicated to scientific research, and no management actions will be allowed that might interfere with this use.

Outstanding Natural Feature Subzone. This subzone contains natural features of outstanding significance which are not within proposed wilderness areas. Management will provide maximum protection from man's activities.

Natural Environment Subzone. Roads, picnicking areas, and trailheads are permitted in this subzone, but development will be minimal.



Management Zoning Plan

Wilderness Natural Park — U.S. Department of the Interior, National Park Service

BOUNDARY ALTERATION, LAND ACQUISITION, AND WILDERNESS ADDITIONS

Boundary Alteration

The 253-acre Crocker Ridge addition will bring that section of Big Oak Flat Road presently within the Stanislaus National Forest inside the park boundary. The 1963 Memorandum of Understanding between the National Park Service and the Forest Service, which presently provides the Park Service with administration of 691 acres, will be changed to recognize the boundary change and to provide for necessary scenic controls for the national forest lands (438 acres) adjacent to the revised boundary. All land is federally owned, so this boundary change will require congressional authorization.

The 160-acre Raymond Mountain deletion will transfer land outside the park's legislative boundary which has been administered by the Forest Service under the 1963 Memorandum of Understanding. The land was acquired by the Park Service to provide water to Mariposa Grove, and the water transmission line crosses the area. It is proposed to transfer the land to Sierra National Forest with provision for continued use by the Park Service. This transfer will also require congressional authorization.

Land Acquisition

The National Park Service will continue to purchase lands within the boundaries of the park as they are offered for sale by willing sellers. No new development will be permitted at Foresta and Aspen Valley, but private owners may continue to use their lands in a manner compatible with park values without the National Park Service initiating acquisition action. Limited residential development of the Wawona community will be permitted. Owners of private land in Section 35 may construct housing on presently platted tracts under land use regulations that will be developed to ensure that park and community objectives are met.

Underlying fee title will be sought for all city of San Francisco lands except those directly associated with primary day-to-day water and power operations. This will allow detached backcountry parcels to be reclassified as wilderness. The city now holds substantial lands in the northern half of the park. The city's use of lands at Hetch Hetchy and Lake Eleanor for water supply and power will continue under terms of the Raker Act.

When land is purchased, applicable provisions of Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, will be employed, and affected county governments will be compensated with payments in lieu of taxes in accordance with Public Law 94-565.

Additions to Wilderness

The National Park Service has recommended to Congress that certain lands (see following table) be reclassified as wilderness or potential wilderness, changing the management policies for these areas. Potential wilderness classification will prevent any further development of facilities or services; should existing developments be removed, there will be no reconstruction of facilities. Wilderness classification will require the eventual elimination of all improvements that do not conform with wilderness activities. Use of wilderness areas will be restricted to activities that are compatible with the definition of wilderness as cited in the *Wilderness Recommendation for Yosemite National Park* (National Park Service, 1972).

All additional lands proposed for potential and actual wilderness classification will be protected from further development. The Ostrander ski hut and the High Sierra camps will be reclassified as potential additions to wilderness. They will continue to be available for public use; if, however, they are eliminated, the areas proposed for potential wilderness additions will be managed as wilderness. Other areas that are proposed for reclassification as either wilderness or potential wilderness are the lands south of Tamarack Flat, Little Yosemite Valley, the lower Illilouette Valley, the Hetch Hetchy roadless area, the city of San Francisco parcels, and the enclaves on the north rim of Yosemite Valley; these areas are currently undeveloped.

Four road segments will be abandoned and restored to a natural condition after they are no longer needed: Six miles of the western portion of Old Tioga Road will be closed when private development in Aspen Valley has been removed. North Mountain Road and the road from Miguel Meadow to Lake Eleanor will be restored after 1985 when the Forest Service will no longer need to use the roads. The road to the baseline camp east of Mather will be removed when the need to maintain the Mather water supply ceases.

This proposal will not affect management or maintenance of Hetch Hetchy Reservoir or O'Shaughnessy Dam.

Proposed Additions to Wilderness
Yosemite National Park
(in acres)

	Wilderness	Potential Wilderness
1972 Wilderness Recommendation	646,700	121
Proposed Additions		
Lower Illilouette Valley	2,580	
South of Tamarack Flat	2,975	
7 miles of eastern Old Tioga Road corridor	6,400	
6 miles of western Old Tioga Road corridor		1,309
6 miles of Hetch Hetchy-Lake Eleanor Road corridor		810
Hetch Hetchy roadless area	7,380	
North Mountain Road corridor (near Hetch Hetchy roadless area)		465
3 enclaves on north rim of Yosemite Valley	90	
Road corridor size reduction	8,575	
Baseline camp area		375
City of San Francisco parcels		240
High Sierra camps and Ostrander ski hut		180
Little Yosemite Valley	1,900	
Subtotal	**29,900**	**3,379**
Total	**676,600**	**3,500**

DEVELOPED AREA PLANS

These plans describe those actions that, using currently available information on environmental conditions, public use forecasts, and energy and economic factors, are considered necessary and desirable to achieve the goals for Yosemite. As the plan is implemented, new information and the results of detailed studies will be used to shape final designs for development actions. Reducing environmental impact and man-made intrusion on the natural and cultural values of the park will be the guide for determining the exact scope of these actions.

YOSEMITE VALLEY DISTRICT

Yosemite Valley

Yosemite Valley is the heart of Yosemite National Park – its most inspiring and popular attraction. The Merced River, the meadows and forests that form its bottomlands, and the spectacular cliffs and waterfalls create one of the grandest natural settings that exist anywhere in the world.

Within this setting, which is both serene and exhilarating, the experience is different for everyone. Picnicking along the Merced River or reading in a flowered meadow is relaxing and calm; a Valley scenic tour or historic walk is inspirational and educational; and a three-day climb on El Capitan is exciting and challenging.

The one thing these experiences have in common is that they make people feel a part of the place. This feeling would be enhanced by freeing people from the perceptions of commercialization and urbanization. They must be able to relax, learn, and meet nature's challenges without the distractions that destroy the spectacular and friendly nature of the area.

While the National Park Service intends to remove all automobile traffic from the Valley, the immediate plan is to greatly reduce traffic there, by restricting automobile use to established capacities and encouraging visitors to leave their automobiles at parking areas with bus service to the Valley. Visitors who drive their automobiles to overnight accommodations or day parking areas in the Valley will use the Valley shuttle buses for transportation during their stay. Those employees who must commute to work will be encouraged to use carpools or buses, rather than private automobiles.

Other proposals for the Valley are designed to reduce impacts on the most significant natural resources and to return the Valley to as near its natural

Provide adequate domestic water supply	– Connect all facilities at entrance station to the existing wastewater treatment plant; expand plant and provide for year-round use – Retain utility building – Convert existing surface water system to an underground source – Retain existing residences

Hetch Hetchy and Lake Eleanor

Hetch Hetchy Reservoir and Lake Eleanor are located in the northwest corner of the park away from the main traffic route, and they receive little use in comparison with Yosemite Valley. Both reservoirs are part of the San Francisco water and power-production system.

Hetch Hetchy Reservoir at O'Shaughnessy Dam is a popular destination for visitors, who spend a short time viewing the dam and the Yosemite Valley-like walls and falls above the reservoir and taking brief walks along the shore. Backcountry hikers frequently use this area as an entry or exit point. The Hetch Hetchy shore has little suitable land for development because it is steep. Since the lake is a domestic water supply, the city of San Francisco restricts its use for water recreation and also restricts use of adjoining lands.

The gently sloping land along Lake Eleanor's northwest and southeast shore is particularly suitable for backcountry use. It is approximately 4 miles from the road terminus and provides easy access to the backcountry for families and novice hikers. The lake only provides water for power production, so restrictions on public use are much less stringent than those at Hetch Hetchy. Visitors to Lake Eleanor also use Cherry Lake, which is located on nearby U.S. Forest Service land.

Hetch Hetchy

Goals	Actions
Visitor Use Continue use as a destination for visitors who wish to view the dam, the reservoir, and the valley	**Visitor Use** – Retain parking for dam and trailhead
Continue to provide backcountry access from Hetch Hetchy	– Retain picnic area – Provide connecting trail from stock unloading area